DOCUMENT RESUME

ED 282 650 PS 016 627

AUTHOR Andersson, Bengt-Erik
TITLE The Importance of Public Day Care for Preschool Children's Later Development.
INSTITUTION Stockholm Inst. of Education (Sweden).
PUB DATE Apr 87
NOTE 14p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Baltimore, MD, April 23-26, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Development; Comparative Analysis; *Day Care; *Day Care Centers; Early Childhood Education; Early Experience; *Elementary School Students; *Family Structure; Foreign Countries; Individual Characteristics; Longitudinal Studies; Rating Scales; *Social Development
IDENTIFIERS *Sweden

ABSTRACT

Data were collected on the type of day care experienced by 119 Swedish children who were followed from their first year of life to age 8. Types of day care included: (1) center care continuing from the first or second year; (2) center care begun at a later age; (3) mixed care, or, transition from family day care to center care; (4) day mother supplemented by part-time kindergarten; and (5) home care supplemented by part-time kindergarten. At their eighth year, children were tested with aptitude tests and rated by their teachers concerning school performance and social and personal development. Findings indicated that in most aspects early center care differed markedly and favorably from the other four groups. Children who began center care early were cognitively and socially more competent than children in the other four groups. They performed better on the aptitude tests. Teachers gave them better ratings in the various school subjects. Teachers also considered them as more socially confident and secure in the school situation. These children had a better ability to express themselves and make themselves understood, and were more persistent, independent, and assertive. For them, the transition from preschool to school was easy and problem-free. Findings also revealed an interaction between family type and type of day care and the importance of mothers' satisfaction with type of day care. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HÖGSKOLAN FÖR LÄRARUTBILDNING
i Stockholm
Institutionen för pedagogik

Datum

Dnr

Handläggare

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 282650

The Importance of Public Day-care for Preschool Children's Later Development.

Bengt-Erik Andersson

Department of Educational Research
Stockholm Institute of Education
Stockholm, Sweden

Postal adress: Box 34103
100 26 STOCKHOLM
Sweden

Poster presented at SRCD's Biennial Meeting, Baltimore, MD, April 23-26, 1987.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. E. Andersson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 016627

HLS 2 p 1984-06

ABSTRACT

In Sweden around 80% of mothers with children below school age, i.e. below the age of 7, work part-time or full-time outside home. This means a great demand for public child care for this age group. At the same time it is much debated in Sweden as in other Western countries whether it is harmful or not for young children to be placed in a day nursery or day care center.

A group of 119 children have been followed from their first year of life up to the age of 8. Each year data about their present kind of daycare were collected.

The children were divided into 5 groups according to type of day care they had experienced during their first 7 years of life:

Group 1: EARLY CENTER CARE (n=33). The children were placed at a day care center already during their first or second year of life and stayed their until school start at age 7.

Group 2: LATE CENTER CARE (n=21). The children entered a day care center at a later time.

Group 3: MIXED CARE (n=16). The children were first placed in family day care (day mother) and later at a day care center. 2/3 had some form of day care from year 1 or 2.

Group 4: DAYMOTHER (n=19). The children have had a daymother; 80% from year 1 or 2 and for at least 5 years.

Group 5: HOME CARE (n=30). The children have stayed at home until school start.

Group 4 and 5 supplemented the care in own or daymother's home with 1 or 2 years in part-time kindergarten.

At the age of 8 the children were tested with aptitude tests and rated by their teachers concerning their school performance and their social and personal development.

In the data analyses we have controlled for other ecological variables related to type of child care, i.e. socioeconomic background, family type, sex of

child, etc.

The results showed that in most aspects group 1 (EARLY CENTER CARE) differed markedly and favorably from the other four groups. The children in group 1 were more competent, cognitively and socially, than children in the other four groups. They performed better on the aptitude tests and the teachers rated them as better in the various school subjects. The teachers also considered them as more socially confident and secure in the school situation. They had a better ability to express and make themselves understood, they were more persistent and independent and also assertive, and the transition from preschool to school was easy and free from problems. The differences between the other four groups were small and most often insignificant. An interaction effect was found between family type and type of daycare. Mothers' satisfaction with type of daycare was also of importance.

PURPOSE

The purpose is to study the effects of various types of child care on children's later cognitive and social competence.

SAMPLE

119 families with young children from 8 neighborhood areas in Sweden's two largest cities were randomly chosen and followed until the end of the first school year, i.e. when the child was around 8 (school starts at 7 in Sweden). 4 neighborhoods were low resource areas and 4 middle resource areas. 2/3 of the families were two-parent families, 1/3 were one-parent families.

METHOD

The families were interviewed every year and data about present type of child care arrangements were collected for each year up to school start. On the basis of this information the children were grouped in five different child care groups (see Abstract).

The cognitive and social competence was measured when children were around 8 years old. Cognitive competence was measured with four aptitude tests - two verbal and two non-verbal - and with teacher ratings of school performance in various subjects. Social competence was measured with a 52 items rating scale. The items described various child behaviour and the teacher rated how well the descriptions fitted the child.

A principal factor analysis with varimax rotation was performed on the ratings and 8 factors were found which were interpretable. They are called: PERSISTENCE AND INDEPENDENCE, SOCIAL CONFIDENCE, SHORT TEMPER AND IMPULSIVITY, PEER CONTACTS, VERBAL FACILITY, DISTRACTABILITY VS ATTENTIVENESS, ANXIETY, and ASSERTIVENESS.
The teachers also rated the TRANSITION FROM PRESCHOOL TO SCHOOL.

STATISTICAL METHODS

In Sweden middle class families and families where the mother has a higher education are more likely to use day care centers for their children, especially in their early years, than working class families. One-parent families (single mothers) have also a special need for day care. Therefore the five day care groups vary with regard to several background variables. This makes the analyses somewhat complicated. We need a method to control for these differences if we want to say something about the effects of day care.

We have chosen to regard the issue as a problem of prediction. How well can we predict the children's later development by the help of the day care variable and some other ecological variables, namely mothers level of education, occupational status of the family, family type - one or two parents in the family -, sex of child and number of changes in the day care arrangements. In addition to these ecological variables we also included mother's subjective satisfaction with her child care arrangements.

The statistical method used is Multiple Classification Analysis (Andrews, Morgan, Sonqvist, & Klem, 1973). It is a method closely related to regression analysis using dummy variable technique. Among other things the method gives for each predictor two sets of means - one set based on rawdata (unadjusted means) showing each predictors direct relation to the criterion variables and one set of means (adjusted means) showing the means for each predictor when all the other predictors are controlled for.

RESULTS

The 7 predictor variables could explain up to 1/3 of the variance in the investigation group in testresults and up to 1/4 of the variance in school perfomrance and some of the social and personality variables. A substantive part of this explained variance was due to the day care variable.

Means are shown in the diagrams. Dotted lines represent unadjusted means, solid lines adjusted means. The small differences between lines indicates that controlling for background variables do not decrease the effect of day care on the criterion measures.

An interaction effect was found between family type and type of child care. Children in one-parent families who had spent most time in home care got very bad ratings on most social and personality variables, while children who entered a day care center early or who had a daymother from early years got positive ratings.

CONCLUSIONS

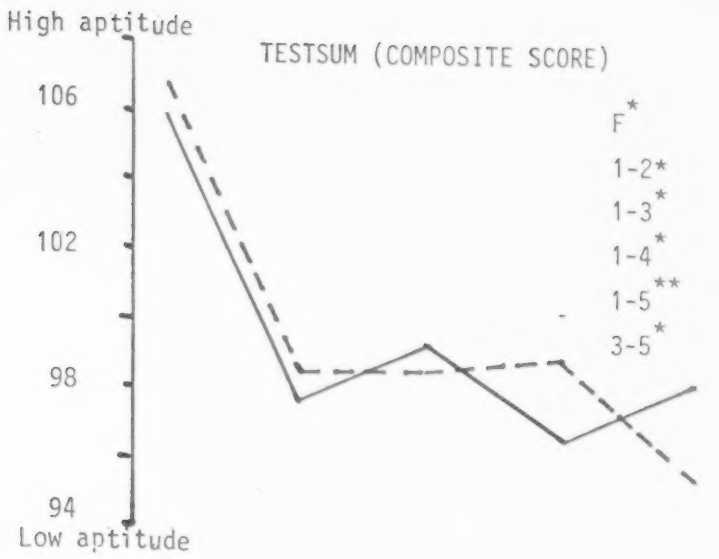
We have studied the effects of child care and other background variables on children's cognitive and social competence at the age of 8. The method we have chosen gives us a possibility to study the independent effect of child care when we control for other important background variables. With the predictor variables chosen we manage to explain up to between 1/3 and 1/4 of the variance in the dependent variables. This is noticeable since the predictor variables are all indices of the child's external environment except for mother's satisfaction. Without knowing anything about the individual child's heritage or personality we can thus with a certain degree of probability predict its later development.

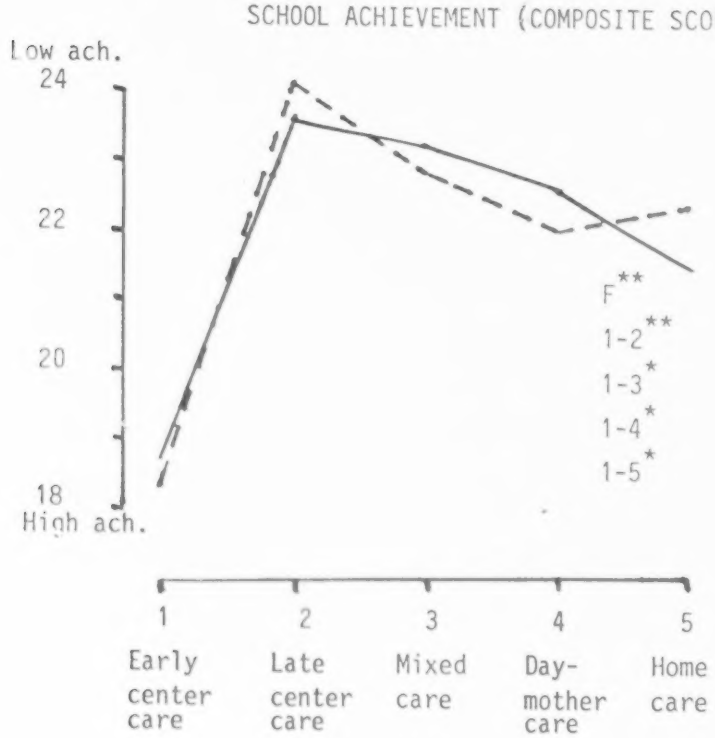
The analysis showed that the two most strongest independent effects could be assigned to the type of child care and mother's satisfaction with that care. This does not mean that families socio-economic status, mother's level of education or family type are of no importance for the child's development. The effect, however, is more indirect than direct. Middle class parents, for instance, chose more often than working class families early center care for their children.

It is interesting that it is not center care in itself, but early center care which turn out to have positive effects on the development. It is also interesting that other kinds of early day care don't have the same effects. One interpretation is that it is the early stimulation day care centers can offer children that is the determining factor. For some children, however, also other stimulation turned out to be of importance. This was the fact for children in one-parent families, for whom early center care but also early family day care (day mothers) was positive while only home care was insufficient.

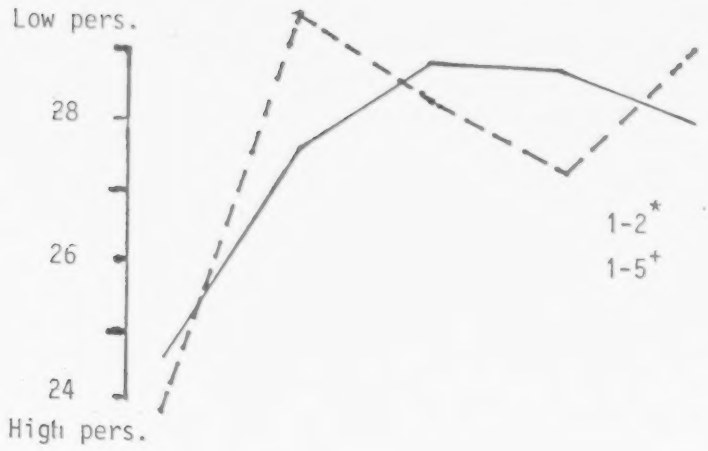
There is, of course, always the possibility that the results can be explained by factors we have not studied. It may, for instance, be that parents placing their child early at centers also can offer

the child a more stimulating home environment, or their involvement and engagement in their child may be higher. If this is due to the fact that they have got a center place for the child, which enables them to develop not only their parental role but also their working role or if these differences exist irrespective of type of child care is impossible to say.

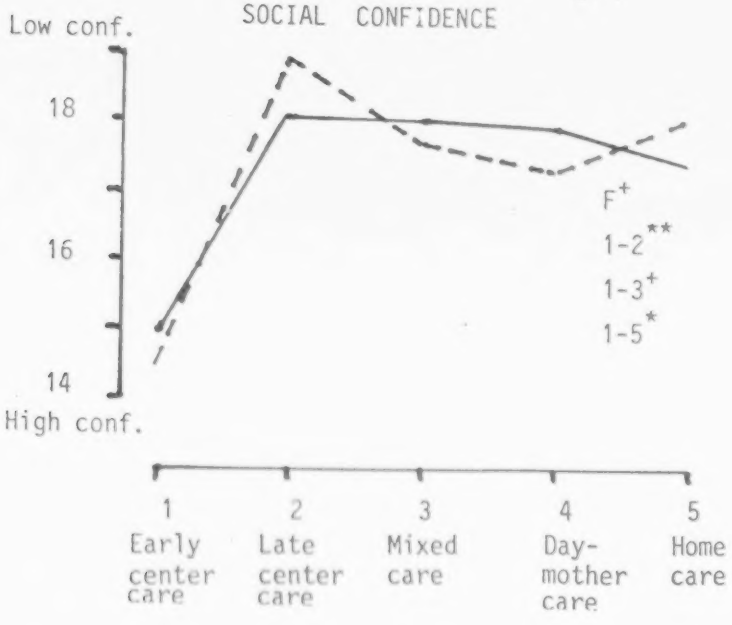

High aptitude
TESTSUM (COMPOSITE SCORE)
106
102
98
94
Low aptitude
F*
1-2*
1-3*
1-4*
1-5**
3-5*


SCHOOL ACHIEVEMENT (COMPOSITE SCORE)
Low ach.
24
22
20
18
High ach.
F**
1-2**
1-3*
1-4*
1-5*
1
2
3
4
5
Early center care
Late center care
Mixed care
Day-mother care
Home care

PERSISTENCE AND INDEPENDENCE

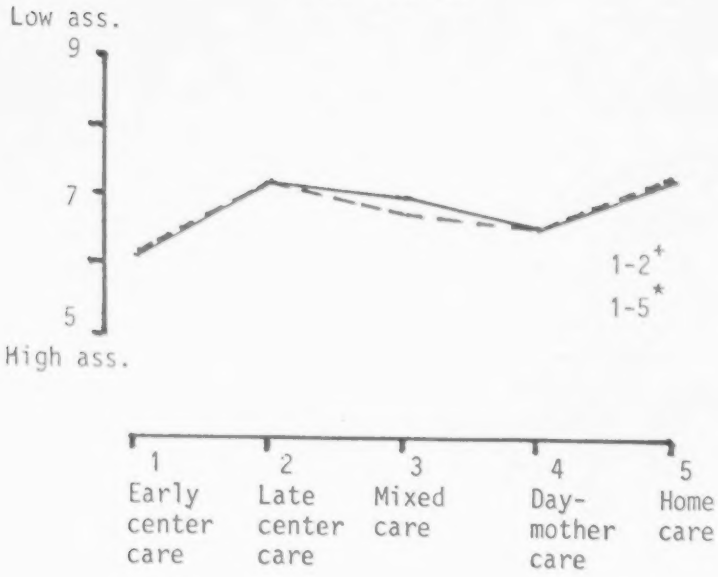


SOCIAL CONFIDENCE

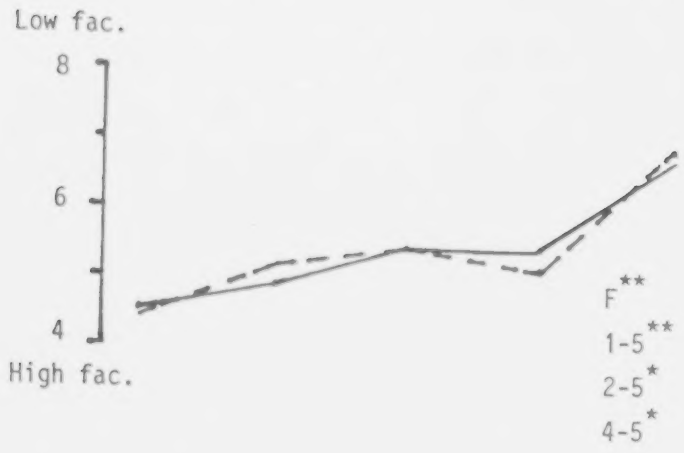


ANXIETY

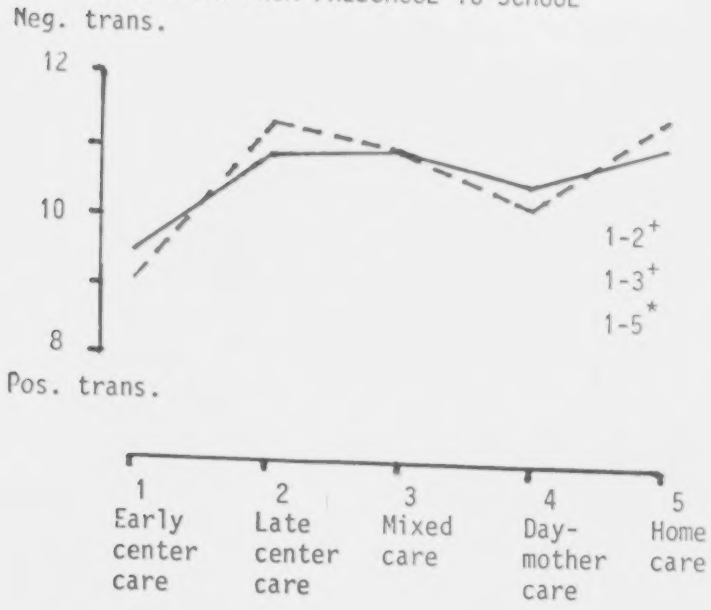
ASSERTIVENESS



VERBAL FACILITY



TRANSITION FROM PRESCHOOL TO SCHOOL



---------- raw means (unadjusted)

_____ adjusted means

F= results of one way ANOVA on raw means.

+ $p \leq .10$
* $p \leq .05$ ⇒ t-test between raw means.
**$p \leq .01$

The study is presented in two reports:

Andersson, B-E: Hemma eller på dagis? En studie av effekterna av samhällelig barnomsorg på barnens utveckling i 8-års åldern. FAST-projektet nr 45. Rapport från pedagogiska institutuionen, HLS, 8/1986.

Andersson, B-E: Home care or external care. A study of the effects of public child care on children's development when 8 years old. Reports on Education and Psychology, No. 2, 1986. Department of Educational Research, Stockholm Institute of Education.

The reports can be ordered from Stockholm Institute of Education, Department of Educational Research,
Box 34103
S-100 26 Stockholm, Sweden